National Park Service
U.S. Department of the Interior

Pacific West
Regional Office
Oakland

1111 Jackson Street
Suite 700
Oakland, CA 94607
510-817-1300 phone
510-419-0197 fax

PACIFIC WEST REGIONAL OFFICE Memorandum

L7617 (PWRO-PP)

AUG 0 9 2005

Memorandum

To: Superintendent, Joshua Tree National Park

From: Regional Director, Pacific West Region

Subject: Environmental Compliance for Reconstruction of Keys View Road

The finalized *Finding of No Significant Impact* for this road improvement project is approved. To complete this particular conservation planning process, at the time when the park announces the decision, all individuals and organizations that received the original supporting environmental assessment (EA) will need to be provided the *Errata* (with instructions to attach it to their copy of the EA in order to comprise a full and complete record of the environmental compliance process undertaken for this initiative).

Jonathan B. Jarvis

Attachment

cc w\atch:
PWR-FM
DSC-TWE

FINDING OF NO SIGNIFICANT IMPACT

KEYS VIEW ROAD RECONSTRUCTION
Joshua Tree National Park
Riverside and San Bernardino Counties, California

PURPOSE AND NEED

The National Park Service will widen and realign the existing 5.6-mile Keys View Road from the intersection with Route 12 (Park Boulevard near Cap Rock) to Keys View Overlook; apply a fog seal to the newly laid road surface and parking areas; chip seal and stripe previously rehabilitated road sections, including Route 12 from Milepost 19.55 to the Cap Rock intersection, Barker Dam Road, Route 12 from Keys View Road junction to the Geology Tour Road junction, Route 12 from the North Entrance to the intersection with Pinto Basin Road; as well as chip seal or slurry seal and re-stripe previously rehabilitated parking areas in Joshua Tree National Park, Riverside and San Bernardino Counties, California. The project is part of a phased effort to rehabilitate many of the park's primary roadways. This action is needed because Keys View Road has many abrupt vertical and horizontal curves; the parking area, curbs, and sidewalks at Keys View are deteriorated; the Keys View Road surface is in poor condition; the pavement is thin and inadequate for the traffic the road receives; and the lack of adequate turnouts at popular trails and climbing areas along Keys View Road results in visitors parking along the soft shoulder and on vegetation. The fog sealing, chip sealing, and slurry sealing are needed to prolong the life of the recently rehabilitated road surfaces; striping will provide safety for vehicles traveling on the roads.

ALTERNATIVES

Selected Action

The selected action is the preferred alternative, as described in the environmental assessment. The selected action presents the National Park Service proposed action and defines the rationale for the action in terms of natural and cultural resource protection and management, visitor use, health and safety, and costs. The selected action meets the Joshua Tree National Park planning objective of providing a safe and adequate transportation route through this portion of Joshua Tree National Park, and opportunities for visitors to stop and experience the park along the route.

The Keys View Road reconstruction would begin near the Cap Rock intersection with Route 12 and extend south for approximately 5.6 miles to the Keys View Overlook. The existing roadway varies from 18- to 20-feet wide and has many vertical and horizontal curves that would be smoothed out to provide a safer alignment. The existing road pavement is thin and in

poor condition with numerous patches. Paving would occur to provide a smooth travel surface suitable for the number and types of vehicles traveling on the road. The road alignment would be smoothed to consistently accommodate a design speed of 30- to 35-miles per hour. The paved road surface would be widened to 22 feet, with an additional curve widening of up to 3 to 4 feet for short radius curves. The road would be curbed on each side to minimize impacts to resources, delineate the road, control unauthorized parking on the shoulders that impacts vegetation, improve aesthetics, reduce problems like roadway edge chipping, eliminate the potential for rollover accidents, and eliminate recurring grading of the road shoulders. The curbing would have tortoise trots (notches in the curb to allow tortoises to exit the road) every 30 meters (98 feet). The lip of the tortoise trots would be no more than 0.5-inch high adjacent to the road pavement. The existing pavement would either be recycled for use as new road subbase or hauled from the site.

The roadwork would consist of replacing the existing road surface, the existing aggregate base, and shaping, compacting, and finishing the roadbed to the required road template. A hot asphalt concrete pavement would be placed over the prepared base in two lifts. Material that is too soft, unstable, or otherwise unsuitable, adjacent to the new road surface, would be removed and replaced with roadway aggregate. Unsuitable material would be buried within the road subbase and replaced with aggregate, or used as part of the curb backfill.

Areas disturbed by the project would be revegetated, and previously disturbed areas removed from roadway use would be rehabilitated (e.g., informal turnouts). The contractor staging areas would be at the Cap Rock and Juniper Flats parking areas. Staging would also occur at the Sheep Pass Borrow Pit outside the project limits.

Upon completion of construction, the road would be posted with a 25 mile per hour speed limit and warnings of the presence of desert tortoises.

The overall new disturbance associated with the Keys View Road reconstruction would be 5.0 acres. Areas of previous disturbance to be reclaimed would be approximately 0.37 acre.

The construction work would result in closure of Keys View Road to visitor access beginning Monday at 6:00 a.m. through Friday 6:00 p.m., between January 2 and February 14, and June 2 and September 30. The road would be open Friday 6:00 p.m. through Monday 6:00 a.m., June 2 through September 30, and all days of the week the remainder of the time with a maximum delay of 30 minutes in one direction. No road construction work would occur on holidays.

The 1995 *General Management Plan* calls for reconstruction of Keys View Road at its present 20-foot paved top width in order to minimize impacts to Joshua trees. However, preliminary design and engineering work on the reconstruction project determined that many Joshua trees would be impacted by the associated reconstruction of roadside ditches, needed to prevent ponding and shoulder erosion caused by stormwater runoff. The design was refined to better serve the intent of the *General Management Plan* prescription; a curbed roadway section was adopted, thereby placing the drainage ditch on the roadway and eliminating the need for ditch grading on the road shoulders. The proposed roadway section is a 22-foot paved top width, curb face to curb face. The limit of disturbance has been narrowed to less than that required for

a roadway with graded ditches; however, consequently the number of Joshua trees impacted has been reduced.

OTHER ALTERNATIVES CONSIDERED

The other alternative considered was the no-action alternative (alternative A). Under the no-action alternative, continuing with routine roadway maintenance will not improve the overall poor condition of the road, nor will it stop vehicles from disturbing new areas by pulling off the road and creating informal turnouts.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is determined by applying criteria identified in section 101 of the National Environmental Policy Act (NEPA) to each alternative considered. In accordance with NEPA, the environmentally preferred alternative will (1) fulfill the responsibility of each generation as trustee of the environment for succeeding generations; (2) assure for all generations a safe, healthful, productive, and aesthetically and culturally pleasing surrounding; (3) attain the widest range of beneficial uses of the environment without degradation or other undesirable and unintended consequences; (4) preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice; (5) achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The selected action to reconstruct Keys View Road is the environmentally preferred alternative. After review of potential impacts to resources and visitors and after incorporating measures into the selected action to avoid or minimize impacts, the selected action achieves the greatest balance between assuring a safe, healthful, and aesthetically attractive environment; accommodating a wide range of uses without degrading the environment or posing risks to health and safety; preserving and enhancing important aspects of a diverse, national heritage; and achieving a balance between resource and visitor use. Specifically, the selected action will:

- protect public and employee health, safety, and welfare by addressing safety concerns associated with a deteriorated road surface and poor visibility, while selecting a design that minimizes the impacts to Joshua trees (criteria 2, 3, and 5)
- protect desert tortoise habitat by curbing the road to prevent damage to habitat from informal turnouts; incorporate tortoise trots into the road to allow tortoises to exit the road (criteria 1, 3, and 4)
- prevent damage to natural and potential cultural resources by providing larger formal turnouts in high-use areas (criteria 1, 3, and 4)
- improve operational efficiency and sustainability by reducing the need for ongoing road maintenance and the consumption of depletable resources associated with such maintenance (criteria 1 and 6)

MITIGATION

Mitigation measures have been incorporated into the selected action to reduce impacts. Mitigation measures include clearly defining construction zones; minimizing introduction of nonnative species; best management practices to minimize erosion, sedimentation, noise, and dust emissions, blending cut areas into the natural environment; and minimizing new disturbance.

Mitigation measures for the reconstruction of Keys View Road are included in the table below:

Resource Area	Mitigation	Responsible Party
General Considerations	Weekly meetings will be held between the Joshua Tree National Park staff and the construction contractor.	NPS / Contractor
	The National Park Service will employ onsite biomonitors to ensure that project contractors implement the appropriate environmental measures in accordance with the plan.	NPS
	Roadside curbing will be hand constructed in sensitive areas such as areas of potential desert tortoise presence or areas where Joshua trees or juniper trees are not scheduled for removal, but are close to the roadway.	Contractor
	The National Park Service project manager will ensure that the project remains confined within the parameters established in the compliance documents and that mitigation measures are properly implemented.	NPS
	Construction zones outside of the existing disturbed area will be identified and fenced with construction tape or some similar material prior to any construction activity. The fencing will define the construction zone and confine activity to the minimum area required for construction.	Contractor
	All protection measures will be clearly stated in the construction specifications, and workers will be instructed to avoid conducting activities beyond the construction zone, as defined by the construction zone fencing. This does not exclude necessary temporary structures such as erosion-control fencing.	NPS / Contractor
	All tools, equipment, barricades, signs, surplus materials, and rubbish will be removed from the project work limits upon project completion. Any asphalt surfaces damaged due to work on the project will be repaired to original condition. All demolition debris will be removed from the project site, including all visible concrete and metal pieces.	Contractor
	Construction activities will be coupled with water sprinkling to reduce fugitive dust emissions.	Contractor
	Idling of construction vehicles will be limited to reduce construction equipment emissions.	Contractor
	Contractors will be required to properly maintain construction equipment (i.e., mufflers) to minimize noise.	Contractor
	A hazardous spill plan will be in place stating what actions will be taken in the case of a spill and preventive measures to be implemented such as the placement of refueling facilities, storage, and handling of hazardous materials, etc.	Contractor

Resource Area	Mitigation	Responsible Party
General Considerations	All equipment on the project will be maintained in a clean and well-functioning state to avoid or minimize contamination from automotive fluids; all equipment will be checked daily.	Contractor
Sediment Control	Best management practices for drainage and sediment control, as identified and utilized by the Federal Highway Administration and the National Park Service, will be implemented to prevent or reduce nonpoint source pollution and minimize soil loss and sedimentation in drainage areas. Use of best management practices in the project area for drainage area protection will include all or some of the following actions, depending on site-specific requirements: ▪ Keep disturbed areas as small as practical to minimize exposed soil and the potential for erosion. ▪ Locate waste and excess excavated materials outside of drainages to avoid sedimentation. ▪ Install silt fences, temporary earthen berms, temporary water bars, sediment traps, stone check dams, or other equivalent measures (including installing erosion-control measures around the perimeter of stockpiled fill material) prior to construction. ▪ Conduct regular site inspections during the construction period to ensure that erosion-control measures were properly installed and are functioning effectively. ▪ Store, use, and dispose of chemicals, fuels, and other toxic materials in an appropriate manner. ▪ Revegetate disturbed areas as soon as possible after construction is completed.	NPS / Contractor
Soils	Erosion and sediment control will be required. Topsoil will be removed from areas of construction and stored for later reclamation use. The topsoil will be redistributed in as near the original location as possible and supplemented with scarification, mulching, seeding, and/or planting with species native to the immediate area.	Contractor
Vegetation	A variety of native plants will be removed, stored in temporary nurseries, and relocated to reclaimed areas, both during the project and following completion of the project.	NPS
	For much of the corridor, revegetation work will be minimized because construction will be completed in previously disturbed areas of the roadway template. Staging areas will utilize previously disturbed areas such as the Cap Rock and Juniper Flats parking areas.	NPS / Contractor
	Revegetation work will use soil conserved along the corridor and native species from genetic stocks originating in Joshua Tree National Park. Revegetation efforts will also attempt reconstruction of the natural spacing, abundance, and diversity of native plant species.	NPS
	Vegetation impacts and potential compaction and erosion of bare soils will be minimized by replacement of topsoil in as near the original location as possible, scarification, mulching, and seeding/ planting with species native to the immediate area.	NPS / Contractor
	Reclaimed areas will be monitored after construction to determine if reclamation efforts are successful or if additional remedial actions are necessary.	NPS
	Remedial actions could include installation of erosion-control structures, reseeding and/or replanting the area, and controlling nonnative plant species.	NPS

Resource Area	Mitigation	Responsible Party
Vegetation	In an effort to avoid introduction of nonnative/noxious plant species, no imported topsoil or hay bales will be used during revegetation. On a case-by-case basis, the following materials may be used for any erosion-control dams that may be necessary: certified weed-free rice straw, cereal grain straw that has been fumigated to kill weed seed, and wood excelsior bales.	NPS / Contractor
	Undesirable plant species will be controlled in high-priority areas and other undesirable species will be monitored and controlled, as necessary. To prevent the introduction and minimize the spread of nonnative vegetation and noxious weeds, the following measures will be implemented during construction: ▪ Minimize soil disturbance. ▪ Pressure wash and/or steam clean all construction equipment to ensure that all equipment, machinery, rocks, gravel, or other materials are cleaned and weed free before entering Joshua Tree National Park. ▪ Cover all haul trucks bringing asphalt or other fill materials from outside the park to prevent seed transport. ▪ Limit vehicle parking to existing roadways, parking lots, or access routes. ▪ Limit disturbance to roadsides and culvert areas, including limiting equipment to the roadbed area; no machinery or equipment should access areas outside the construction zone. ▪ Obtain all fill, rock, or additional topsoil from the project area, if possible. If not possible, obtaining weed-free sources from National Park Service approved sources outside the park will be required. ▪ Initiate revegetation of disturbed sites immediately following construction activities. ▪ Monitor disturbed areas following construction to identify growth of noxious weeds or nonnative vegetation. Treatment of nonnative vegetation will be completed in accordance with NPS-13, *Integrated Pest Management Guidelines*.	NPS / Contractor
	To maximize vegetation restoration efforts after completion of construction activities, the following measures will be implemented: ▪ Salvage topsoil from construction areas for reuse during restoration on disturbed areas. ▪ Salvage native vegetation for subsequent replanting in disturbed areas. ▪ Monitor revegetation success following construction, implementing remedial and control measures, as needed.	NPS
	Joshua trees will be salvaged for replanting using one of several techniques designed to minimize handling and avoid plant-shocking. Such techniques can include live transplanting (immediately moving the trees from the current location to a new location) or containerizing the tress and removing them from the area for temporary storage.	NPS
	Joshua tree transplants will be overseen by a qualified vegetation expert with experience in handling Joshua trees.	NPS
Wildlife	If the rosy boa (*Lichanura trivirgata*) or any rattlesnake species (*Crotalus* ssp.) are observed during construction; monitoring, capture, and release away from the project area will occur.	NPS / Contractor

Resource Area	Mitigation	Responsible Party
Wildlife	The contractor will be required to maintain strict garbage control so that scavengers (e.g., corvids) are not attracted to the project area. No food scraps will be discarded or fed to wildlife.	Contractor
	Potential roadside habitat for small species consisting of downed trees and rock piles will be replaced upon completion of project construction activities.	NPS / Contractor
Threatened and Endangered Species and Species of Special Concern	Only qualified and/or authorized biologists, as appropriate, will be used for oversight of all activities within the roadway corridor. The National Park Service will submit the names and qualifications of proposed authorized biologists to the U.S. Fish and Wildlife Service for review and approval at least 15 days prior to initiation of surface-disturbing events. No project-related activity will commence unless one or more authorized biologists have been selected.	NPS
	An individual will be designated the field contact representative to oversee project compliance and coordination. The field contact representative will coordinate with the U.S. Fish and Wildlife Service and be authorized to halt any activity that may endanger desert tortoises.	NPS
	The field contact representative will be present during all monitoring/survey efforts, road reconstruction, and parking/turnout area construction.	NPS
	Only the authorized biologists, approved by the U.S. Fish and Wildlife Service, will be allowed to handle/relocate desert tortoises.	NPS
	Presence/absence surveys have been conducted (April–June 2003) and will be conducted again just prior to construction. Clearance surveys will be conducted one week prior to commencement of any construction/rehabilitation activities. All potential desert tortoise burrows within 100 feet of the designated routes, parking/ turnout sites (existing or proposed), or staging areas will be examined. At the completion of road reconstruction, all materials used to mark or identify the tortoise burrows will be promptly removed.	NPS
	Any desert tortoise relocated or otherwise removed from areas undergoing road reconstruction will be handled in accordance with the procedures described in *Guidelines for Handling Desert Tortoises During Construction Projects* (DTC 1994, revised 1996). All desert tortoises will be translocated the minimum distance practicable, within appropriate habitat, to facilitate the animal's safety and survival.	NPS
	Temporary tortoise-proof fencing will be established around all staging areas. The fence will consist of a non-breachable barrier and support structures. Galvanized hardware cloth with 0.5-inch diameter mesh openings, and at least 18-inches high will be firmly secured along the base of the fence in direct contact with the ground. Fence placement and construction will be supervised and approved by the field contact representative. All tortoise fencing will be dismantled and transported from the site following project completion.	Contractor
	Temporary fencing established around staging areas will be inspected at least weekly, and corrective action taken to maintain the integrity of the tortoise barrier.	NPS / Contractor

Resource Area	Mitigation	Responsible Party
Threatened and Endangered Species and Species of Special Concern	Fenced staging areas will be gated with a desert tortoise exclusion device. This gate will remain closed at all times, except when vehicles are entering or leaving the staging area. If it is deemed necessary to leave the gate open for extended periods of time (e.g., during high traffic periods), the gate may be left open as long as a monitor is present. This monitor will report any tortoise activity to the authorized biologist who, in turn, will take appropriate remedial actions.	Contractor
	Construction vehicles parked overnight along the side of the road in pre-existing turnouts will be checked for the presence of desert tortoises prior to moving the vehicle in the morning. Construction crew workers will survey under the vehicles from all four directions to assure that a tortoise did not move under the vehicle. If a tortoise is found, the authorized biologist will be contacted to remove the tortoise and place it outside the construction area.	Contractor
	Any project-related vehicle or equipment operating on unpaved roads will not exceed a speed limit of 25 miles per hour.	NPS / Contractor
	Crosscountry (off road) travel will not be authorized, except under life-threatening/emergency situations.	NPS / Contractor
	The field contact representative will conspicuously stake, flag, or mark work area boundaries (including the new access roads, realignments, and parking/turnout areas) to minimize surface disturbance to the surrounding habitat. Material stockpiling, machinery storage, and vehicle parking will only be permitted in designated areas.	NPS
	The contractor must protect against intrusion by the desert tortoise at sites with potential hazards (auger holes, steep-sided depressions, etc.).	Contractor
	A desert tortoise education program will be presented by the field contact representative to all construction personnel prior to any construction activities. Following the onset of construction activities, any new employees will be required to formally complete the tortoise education program prior to working onsite. At a minimum, the tortoise education program will cover the following topics: (1) desert tortoise distribution/occurrence, (2) general behavior and ecology, (3) sensitivity of the species to human activities, (4) legal protection, (5) penalties for violation of state or federal laws, (6) reporting requirements, and (7) project protective mitigation measures.	NPS / Contractor
	The field contact representative will maintain a complete record of all desert tortoise encounters. The record will include location, date, time, life history, general condition, identification numbers, and action taken. Within 90 days following the completion of this project, a report of all field contact representative activities and actions will be submitted to the U.S. Fish and Wildlife Service.	NPS
	No pets or firearms will be permitted inside the project's construction boundaries or other associated work areas at any time.	NPS / Contractor
	Temporary silt fencing will be installed around the parking areas scheduled for slurry sealing. The silt fence will be at ground level and placed in such manner as to prohibit animals, specifically tortoises, from crawling under the fencing. The fencing will be left in place until the slurry seal hardens. The fencing will be periodically monitored by authorized biologists.	Contractor

Resource Area	Mitigation	Responsible Party
Threatened and Endangered Species and Species of Special Concern	During fog sealing, one lane of traffic will remain open at all times. Biological monitors (approximately one monitor per mile of fog-sealed roadway) will patrol their sections on foot and in vehicles to assure that no tortoise enters the roadway.	NPS
	Upon completion of this project, all materials and vehicles/ equipment will be removed from the project area.	Contractor
	The estimated 5.0 acres of habitat disturbance will be mitigated through restoration of 0.37 acre in the project area, and through 10.0 acres of purchased land.	NPS
	A litter control program will be implemented during construction to eliminate the accumulation of trash to avoid attracting common ravens that may prey on juvenile desert tortoise. All trash and food items will be promptly contained in raven- and coyote-proof containers provided by the contractor. These containers will be transported off park lands on a daily basis.	Contractor
	The road curbing will include the use of tortoise trots to allow passage of the desert tortoise across the road and to provide an exit point for the tortoise should any move onto the road surface.	Contractor
	A 3-year, post-construction monitoring program will be implemented for the Keys View Road rehabilitation using the same procedures as previously reviewed and approved for Joshua Tree National Park. The program will assess the potential effects of curbing on tortoise movement/survival. Annual reports submitted to the U.S. Fish and Wildlife Service will summarize findings; evaluate curb/trot effectiveness and adequacy, and provide recommendations, as appropriate, to facilitate tortoise passage across the newly improved roadways.	NPS
	The road will be posted for 25 mile per hour speed limits and signs will be posted warning of potential encounters with tortoises to reduce vehicles strikes over the long term use of the road.	NPS
Air Quality	To control fugitive dust, water sprinkling will occur, as needed, on active work areas where dirt or fine particles are exposed.	Contractor
	Concrete and asphalt plants will be located outside Joshua Tree National Park. No overnight storage of these materials will be permitted.	Contractor
	Construction debris will be immediately hauled from the park to an appropriate disposal location.	Contractor
Archeology	Should unknown archeological resources be uncovered during construction, work will be halted in the discovery area, the site secured, and Joshua Tree National Park will consult according to 36 CFR 800.13 and, as appropriate, provisions of the Native American Graves Protection and Repatriation Act of 1990.	NPS
	In compliance with the Native American Graves Protection and Repatriation Act of 1990, the National Park Service will also notify and consult with concerned American Indian tribal representatives for the proper treatment of human remains, funerary, and sacred objects should these be discovered during the project.	NPS
	An archeological monitor will be present during periods when ground-disturbing activities are occurring in the vicinity of the "John Lang" gravesite (IDLCS058503), and the Juniper Flats parking area.	NPS

Resource Area	Mitigation	Responsible Party
	The "John Lang" gravesite, located within the area of potential effect for the road construction, will be fenced during construction activities.	NPS / Contractor
Archeology	Archeological specimens found within the construction area will be removed only by the National Park Service or their designated representatives.	NPS
Visitor Experience	Traffic delays that result from construction activities will be limited to a 30-minute maximum in one direction.	Contractor
	From June 1 through September 30, road closures will be implemented south of Cap Rock from Monday 6:00 a.m. through Friday 6:00 p.m. No road closures will occur on the weekends from Friday 6:00 p.m. through Monday 6:00 a.m. No work will occur on holidays.	Contractor
Health and Safety	Work hours will be from dawn to dusk to avoid the increased potential for accidents after dark.	Contractor
	Mid-week road closures will allow work to occur without potential for traffic safety concerns.	Contractor

WHY THE SELECTED ACTION (PREFERRED ALTERNATIVE) WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined by 40 CFR 1508.27, significance is determined by examining the following criteria:

Impacts that may be both beneficial and adverse: These impacts are impacts that may have both beneficial and adverse aspects. Overall, these impacts may be beneficial, but there may still be major adverse impacts that require analysis in an environmental impact statement. No major adverse or beneficial impacts were identified that will require analysis in an environmental impact statement.

The selected action will have no beneficial or adverse impact on wetlands and floodplains, designated critical habitat, ecologically critical areas, wild and scenic rivers, other unique natural areas, geology and geologic hazards, water quality, prime and unique farmland, park operations, socioeconomic environment and land use, environmental justice, archeological resources, historic structures, ethnographic resources, cultural landscapes, museum objects, Indian trust resources, and soundscapes.

The selected action will contribute short-term, negligible, adverse impacts to air quality and health and safety; short-term, negligible to minor, adverse impacts to wildlife; short-term, minor, adverse impacts to visual resources; short-term, moderate, adverse impacts to soils, vegetation, and visitor use and experience. There will be long-term, negligible to minor, adverse impacts to wildlife; long-term, minor, adverse impacts to visual resources and vegetation; long-term, moderate, adverse impacts to soils; and long-term, moderate, beneficial impacts to visitor use and experience and health and safety. Impacts to archeological resources would be both minor to moderate and adverse and negligible to minor and beneficial.

For threatened and endangered species, both federally listed and state or other agency listed, the overall impacts to the desert tortoise will be short and long term, moderate, and adverse. Impacts to the flat-tailed lizard (California special concern species) will be short term, minor, and adverse, and long term, negligible, and adverse. Impacts to the desert bighorn sheep (BLM sensitive), mountain quail (Audubon watch list), Bendire's thrasher (California special concern species), and Le Conte's thrasher (California special concern species) will be short term, negligible, and adverse. There will be no long-term impacts to these species. Impacts to special-status plant species will be short term, negligible, and adverse.

Degree of effect on public health or safety: The selected action will have a short-term, negligible, adverse impact to public health and safety, and a long-term, moderate, beneficial effect to health and safety. The selected action includes widening and realigning Keys View Road, rehabilitating pavement at Keys View parking area, applying a fog seal to the new road surface and slurry sealing the new parking area surface, and reconstructing the sidewalks and walls. Parking for Cap Rock area and for the Juniper Flats backcountry registration board will be rehabilitated, and turnout parking will be added. The selected action also includes chip sealing and striping of previously rehabilitated road sections, as well as chip sealing or slurry sealing and re-striping previously rehabilitated parking areas. The selected action will provide a safe driving surface for park visitors and will have curbing on either side to prevent inattentive drivers from accidentally leaving the road surface. Construction of parking areas and turnouts will provide adequate parking within designated areas, eliminating informal turnouts and the associated safety hazards with vehicles not pulling completely off the road.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas: As described in the environmental assessment, ecologically critical areas, floodplains, prime and unique farmland, wetlands, wilderness values, and water quality will not be affected. There are no known cultural landscape features, Indian trust resources, or ethnographic resources identified in the project area that could be affected by the current project actions. Surveys by the Western Archeological and Conservation Center archeologists in 1979 and 2001, and a survey by Warren and Schneider in 1992, identified pre-historic and historic archeological sites along Keys View Road.

A more extensive survey conducted in 2003, by Western Archeological and Conservation Center archeologists identified five sites within a 100-meter (328 feet) wide corridor along Keys View Road. Four of the five sites appear to be surface historical/modern trash scatters, none of which are considered eligible for the National Register of Historic Places (NRHP), while the fifth site, a historic burial known as the "John Lang" gravesite, is considered potentially eligible. The survey also identified 19 isolated finds consisting of such items as historical cans and tins, two sherds, and a two-track road remnant. None of the isolated finds were considered eligible for the NRHP. The "John Lang" gravesite is located within the area of potential effect and will be fenced during construction. A National Park Service archeologist will be present to ensure the gravesite is not disturbed during ground-disturbing activities in the vicinity. The monitor will also be present during ground-disturbing activities in the vicinity of the Juniper Flats parking area.

Degree to which effects on the quality of the human environment are likely to be highly controversial: There were no highly controversial effects identified during either preparation of the environmental assessment or the public review period.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks: There were no highly uncertain, unique, or unknown risks identified during either preparation of the environmental assessment or the public review period.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration: The selected action neither establishes a National Park Service precedent for future actions with significant effects nor represents a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant, but cumulatively significant impacts: Impacts to air quality, soils, vegetation, wildlife, special-status species, archeological resources, visual resources, visitor experience, and health and safety were analyzed in the selected action of the environmental assessment. As described in the environmental assessment, cumulative impacts were determined by combining the impacts of the preferred alternative with other past, present, and reasonably foreseeable future actions. Past projects identified during scoping that have contributed to cumulative impacts include:

- replacement of 139 older pit toilet facilities with 75 new restroom facilities throughout the park
- reconstruction of Route 12 (Park Boulevard) from the intersection with Keys View Road to Geology Tour Road

Current actions and those projected for the future could also contribute to cumulative effects. These include:

- controlled burns on the Covington Flats area of the park (west side of the park)
- development of approximately 140 wayside exhibits in accordance with the wayside exhibit plan, mostly along trailheads and roadways
- replacement of many headquarters buildings with newer buildings
- repaving of Pinto Basin Road from Gold Point to Cottonwood Visitors Center
- repair to flooding damage on sections of Pinto Basin Road
- increased development pressures for private lands outside the park boundary

The selected action, along with past, present, and future actions, will have short- and long-term, negligible to minor, adverse impacts on soils; short- and long-term, minor, adverse impacts on vegetation and wildlife; long-term, minor to moderate, adverse impacts to special-status species and archeological resources; and long-term, minor, adverse impacts to visual resources. Minor to moderate, adverse impacts to visitor experience will be short term, with a long-term, minor to moderate, beneficial impact. In the short term, the selected action, combined with other past, present, and future actions, will have negligible adverse impacts on health and safety, with minor to moderate, long-term, beneficial impacts.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat: Based on the species list provided by the U.S. Fish and Wildlife Service, the primary special-status species of concern is the desert tortoise. During the Keys View Road reconstruction, short-term, moderate, adverse effects will be anticipated from increased levels of human activity, noise, and the ground vibrations produced by vehicles and heavy equipment. Surveys will be completed prior to construction and any tortoises in the project area will be removed by a qualified biologist. A tortoise monitor will also be present during construction activities to monitor for tortoise movement into the construction area. Long-term, moderate, and adverse impacts will result due to continued road use and the road widening and curve straightening that could increase driving speeds on the road. The road will be posted with a 25 mile per hour speed limit for the entire length as a mitigation for desert tortoise injuries due to higher speeds.

A biological assessment for the potential effects of the project on the desert tortoise was completed and submitted to the U.S. Fish and Wildlife Service for their review. The U.S. Fish and Wildlife Service issued a biological opinion on January 6, 2005, stating that the Keys View Road project is not likely to jeopardize the continued existence of the desert tortoise or to adversely modify critical habitat.

There is no critical habitat within or adjacent to the project area.

Whether the action threatens a violation of federal, state, or local environmental protection laws: The selected action violates no federal, state, or local environmental protection laws.

IMPAIRMENT OF PARK RESOURCES OR VALUES

The implementation of the selected action will not constitute an impairment of park resources or values. Impacts documented in the environmental assessment and summarized above will not affect resources or values key to the natural and cultural integrity of the park or alter opportunities for the enjoyment of the park. The selected action will not impair park resources and will not violate the National Park Service Organic Act. This conclusion is based on a thorough analysis of the impacts described in the environmental assessment, the lack of agency and public comments received, and the professional judgment of the decision maker, in accordance with NPS *Management Policies* (2001). As described in the environmental assessment, implementation of the selected action (preferred alternative) will not result in major adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Joshua Tree National Park, (2) key to the natural or cultural integrity of the park, or (3) identified as a goal in the park's *General Management Plan* or other relevant National Park Service planning documents.

PUBLIC INVOLVEMENT AND AGENCY CONSULTATION

Scoping is an effort to involve agencies and the general public in determining issues to be addressed in the environmental assessment. Scoping is used to determine important issues to be given detailed analysis in the environmental assessment and eliminate issues not requiring detailed analysis; allocates assignments among the interdisciplinary team members and/or other participating agencies; identifies related projects and associated documents; identifies permits, surveys, consultations, etc. required by other agencies; and creates a schedule that allows adequate time to prepare and distribute the environmental assessment for public review and comment before a final decision is made. Scoping includes any interested agency, or any agency with jurisdiction by law or expertise (including the State Historic Preservation Office (SHPO) and Indian tribes) to obtain early input.

Park staff and resource professionals of the National Park Service – Denver Service Center and the Federal Highway Administration conducted internal scoping. This interdisciplinary process defined the purpose and need, identified potential actions to address the need, determined the likely issues and impact topics, and identified the relationship of the proposed action to other planning efforts at the park.

A press release initiating scoping and describing the proposed action was issued September 19, 2003. Comments were solicited during a public scoping period that ended October 22, 2003. Five comment letters were received; four from individuals interested in the project and one from the National Parks Conservation Association. These comments included concerns with the need for the road improvements, concerns with road closures during construction, concerns with speed increases following completion of the road improvements, and concerns with the disturbance as a result of the construction.

The environmental assessment was made available for public and agency review and comment during an approximate 7-week period from April 18 through June 10, 2005. Joshua Tree National Park provided copies of the document to approximately 125 agencies, organizations, and interested parties on the park mailing list, including American Indian groups typically associated with the park. The document was available for review on the park Web site, and interested parties could contact the park by telephone or mail and request copies of the document. Notice of availability of the environmental assessment was published in the *Desert Trail*, a local newsletter in Twentynine Palms, California, on April 28, 2005, and notice of the extended public comment was published in the same newspaper on May 19, 2005. In addition, during the public review period, park personnel scheduled two site tours to answer questions from interested parties. The first tour was conducted May 16, 2005, and included six individuals from Joshua Tree National Park and six members of various organizations including the Citizens for Chuckwalla Valley, National Park Conservation Association, Sierra Club, and the Center for Biological Diversity. A second site tour was scheduled for May 28, 2005, and notice was provided in the *Desert Trail*; however, no individuals attended the second site tour.

Seven comment letters were received on the environmental assessment. Five letters were from individuals interested in the project and two letters were from organizations, including the

National Parks Conservation Association and the Morongo Basin Conservation Association. Issues raised in the public comments included impacts to visitor experience as a result of the road widening, concerns with impacts to Joshua trees as a result of the construction, concerns that the road widening would encourage speeding, concerns with compliance with the 1994 *General Management Plan*, and concerns with revegetation efforts as presented in the environmental assessment. None of the comments received introduced substantive new information nor raised any issues not fully considered in the environmental assessment. No modifications to the selected action were made as a result of comments, although several mitigation measures were added or modified to provide clarification and address concerns. Mitigation measures added included weekly meetings between the National Park Service and the construction contractor; employment of onsite biomonitors to ensure environmental protection measures are being implemented; hand construction of roadside curbing in sensitive areas; and employment of a qualified vegetation expert with experience in the handling of Joshua trees. Mitigation measures clarified in the document included a clarification for the Joshua tree salvage and temporary storage methods; clarification of the snake species to be monitored, captured, and released in the project area; and clarification of the specifications for the desert tortoise fencing. Several of the public comments required additional clarification to the environmental assessment. The information on mitigation measures and additional clarification has been added to the environmental assessment through an errata sheet, which is to be attached to the Keys View Road Reconstruction Environmental Assessment / Assessment of Effect.

The National Historic Preservation Act, as amended in 1992 (16 USC 470 *et seq.*), NEPA, National Park Service Organic Act, NPS *Management Policies* (2001), Director's Order – 12: *Conservation Planning, Environmental Impact Analysis, and Decision-making* (2001), and Director's Order – 28: *Cultural Resources Management Guideline*, require consideration of impacts on cultural resources, either listed in or eligible to be listed in, the NRHP.

Compliance with section 106 of the National Historic Preservation Act was completed through the NEPA process. A copy of the environmental assessment / assessment of effect was submitted to the California SHPO on April 18, 2005. The California SHPO responded with a letter dated May 13, 2005, concurring with the assessment that the project will not have an adverse effect on archeological resources. Consultation will resume with the California SHPO if archeological materials are discovered during construction.

Compliance with section 7(c) of the Endangered Species Act of 1973, as amended, was completed through consultation with the U.S. Fish and Wildlife Service and development of a biological assessment for the potential effects of the project on the desert tortoise. The U.S. Fish and Wildlife Service issued a biological opinion on January 6, 2005, stating that the Keys View Road project is not likely to jeopardize the continued existence of the desert tortoise or to adversely modify critical habitat.

CONCLUSION

The selected action (preferred alternative) does not constitute an action that normally requires preparation of an environmental impact statement. The selected action (preferred alternative) will not have a major impact on the human environment. Negative environmental impacts that could occur are considered short term and negligible to moderate in intensity and long term, negligible to minor in intensity. Mitigation measures will be incorporated into the selected action (preferred alternative) to reduce or eliminate impacts. There are no foreseen significant adverse impacts on public health, public safety, threatened or endangered species, historic properties, either listed in or eligible for listing in the NRHP, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection laws, nor will it cause impairment of park resources or values.

Based on the foregoing, it has been determined that an environmental impact statement is not required for this project and, thus, will not be prepared.

Recommended:

4 AUG 2005

Curtis Sauer, Superintendent
Joshua Tree National Park

Approved:

8/9/05

Jonathan B. Jarvis, Regional Director
National Park Service, Pacific West Region

ERRATA SHEET

KEYS VIEW ROAD RECONSTRUCTION
ENVIRONMENTAL ASSESSMENT / ASSESSMENT OF EFFECT
JOSHUA TREE NATIONAL PARK

This Errata Sheet is being prepared as a technical supplement to the *Keys View Road Reconstruction Environmental Assessment / Assessment of Effect*. The errata sheet should be attached to the environmental assessment / assessment of effect in order to have a full and complete record of the overall conservation planning and environmental impact analysis process.

The *Keys View Road Reconstruction Environmental Assessment / Assessment of Effect* was available for public review and comment for approximately 7 weeks from April 18, 2005 through June 10, 2005. Seven comment letters were received during the public comment period. Two letters were from organizations while the remaining five letters were from individuals. The comments received were screened to determine whether any new issues, reasonable alternatives, potential for significant impacts, or mitigation measures were suggested. The comments received did not identify new issues or alternatives, nor did they correct or add substantially to the facts presented in or increase the level of impact described in the environmental assessment. Comments in favor of or against the proposed action or alternatives, or comments that only agree or disagree with National Park Service policy, are not considered substantive (i.e., they did not challenge the accuracy of the analysis, dispute information accuracy, suggest different viable alternatives, and/or provide new information that makes a change in the proposal). Several comments, although not substantive, did result in changes to the environmental assessment. In addition, the National Park Service evaluated comments and determined that additional information was necessary in several areas of the environmental assessment to more fully explain the preferred alternative. No design or construction modifications to the preferred alternative were made as a result of comments.

The comments received and the resulting text changes to the environmental assessment are outlined below. Revised or new language is underlined.

Location	Text Change
Summary Page	The fourth paragraph of the environmental assessment has been modified to correct inconsistencies in the environmental consequences as presented in the "Environmental Consequences—Alternative B: Preferred Alternative" section of the document. "The preferred alternative would contribute short-term, negligible, adverse impacts to air quality and health and safety; short-term, negligible to minor, adverse impacts to wildlife; short-term, minor, adverse impacts to <u>visual resources</u>; and short-term, moderate, adverse impacts to <u>soils</u>, vegetation, and visitor use and experience. "There would be long-term, negligible to minor, adverse impacts to wildlife; long-term, minor, adverse impacts to visual resources <u>and vegetation</u>; long-term, moderate, adverse impacts to soils; and long-term, moderate, beneficial impacts to visitor use and experience and health and safety. <u>Impacts to archeological resources would be both minor to moderate and adverse from increased traffic at the Juniper Flats parking area and negligible to minor and beneficial from decreased informal turnouts and social trailing along the length of the road.</u>"

Location	Text Change
Page 9, Scoping	In the third paragraph, the environmental assessment indicated that no comments were received during the public scoping period that ended on October 22, 2003. In fact, five e-mail letters were received during this period. Four of the e-mail letters came from individuals with the fifth e-mail letter coming from the National Parks Conservation Association. The third paragraph has been revised as follows: "A press release initiating scoping and describing the proposed action was issued on September 19, 2003 (appendix A). Comments were solicited during a public scoping period that ended October 22, 2003. Five comment letters were received; four from individuals interested in the project and one from the National Parks Conservation Association (NPCA). In general, commenters expressed concerns that the road project not change the character of the park and most commenters would like to see lower speed limits maintained. One commenter was also concerned with the road edges and wanted to minimize the potential for road edges to erode into the road. With the curbing implemented as a part of this project and the lack of road cuts, eroding edges would not be a problem. Several commenters asked that Keys View Road be left open rather than closed during construction, particularly on weekends and holidays. The closure schedule is discussed in this environmental assessment and contemplates closure during the week with the road opened on the weekends and for holidays. The NPCA supported efforts to eliminate opportunities for vehicles to informally pull off the road damaging natural resources, however, expressed concerns with increased speed limits. The NPCA also wanted to make sure the environmental assessment addressed impacts to plant species, particularly the impacts to Joshua trees. Impacts to all plant species are discussed in the "Vegetation" section under "Environmental Consequences—Alternative B: Preferred Alternative" of this environmental assessment. The actual number of Joshua trees to be impacted, as well as an overall discussion of all species to be impacted, is included in this section. The NPCA made several comparisons to other road projects in Joshua Tree National Park and asked why all of the projects were not combined into one environmental impact statement. These road projects were addressed in the 1995 environmental impact statement / general management plan. The environmental assessment assesses impacts at the project level, using detailed engineering designs. The NPCA also raised questions about speeding that might have been observed on other park roads following completion of improvements and total disturbance limits for Keys View Road work given what had been observed for other projects. According to park rangers, speeding has not been a problem following improvements on other park roads. Design engineers have provided total disturbance limits for the work on Keys View Road in the discussions under "Environmental Consequences—Alternative B: Preferred Alternative" in this environmental assessment. The public and American Indian groups traditionally associated with the lands of Joshua Tree National Park will also have an opportunity to review and comment on this environmental assessment / assessment of effect."
Page 22, Cap Rock Parking Area	The sixth sentence has been changed as follows to clarify that the intent is to discourage larger vehicles from traveling on Keys View Road: "Since Joshua Tree National Park would post signs discouraging large vehicles such as large RVs from traveling on Keys View Road, the Cap Rock parking area would serve as a turnaround for those large vehicles that enter Keys View Road."
Pages 28 through 33, Mitigation Measures	The following mitigation measures are added to the environmental assessment to clarify the environmental protection measures to be implemented and to provide additional details for Joshua tree replanting:

Resource Area	Mitigation
General Considerations	Weekly meetings would be held between the Joshua Tree National Park staff and the construction contractor.
	The National Park Service would employ onsite biomonitors to ensure that the project contractors implement the appropriate environmental measures in accordance with the plan.
	Roadside curbing would be hand constructed in sensitive areas such as areas of potential desert tortoise presence or areas where Joshua trees or juniper trees are not scheduled for removal, but are close to the roadway.
Vegetation	Joshua trees would be salvaged for replanting using one of several techniques designed to minimize handling and avoid plant-shocking. Such techniques can include live transplanted (immediately moving the trees from the current location to a new location) or containerizing the trees and removing them from the area for temporary storage.
	Joshua Tree transplants would be overseen by a qualified vegetation expert with experience in handling of Joshua trees.

The wildlife mitigation measure discussing moving of snakes observed during construction has been modified to include any rattlesnake species encountered.

Resource Area	Mitigation
Wildlife	If the rosy boa (*Lichanura trivirgata*) or any rattlesnake species (*Crotalus* ssp.) are observed during construction; monitoring, capture, and release away from the project area would occur.

The following clarification is added to the fencing mitigation measure for the desert tortoise:

Resource Area	Mitigation
Threatened and Endangered Species and Species of Special Concern	Temporary tortoise-proof fencing will be established around all staging areas. The fence will consist of a non-breachable barrier and support structures. Galvanized hardware cloth with 0.5-inch diameter mesh openings, and at least 18-inches high will be firmly secured along the base of the fence in direct contact with the ground. Fence placement and construction will be supervised and approved by the field contact representative. All tortoise fencing will be dismantled and transported from the site following project completion.

The following clarification is added to the desert tortoise mitigation measures as a result of the Biological Opinion received from U.S. Fish and Wildlife Service for the proposed project.

Resource Area	Mitigation
Threatened and Endangered Species and Species of Special Concern	The road will be posted for 25 mile per hour speed limits and signs will be posted warning of potential encounters with tortoises to reduce vehicles strikes over the long term use of the road.

Location	Text Change
Page 76, Environmental Consequences—Alternative B: Preferred Alternative, Soils	The conclusion section does not match the conclusions in the opening discussion for this section. The first sentence of the conclusion section has been revised to read as follows. "The overall adverse impacts to soils would be short and long term, moderate, and adverse."
Page 81, Environmental Consequences—Alternative B: Preferred Alternative, Threatened, Endangered, and Special-Status Species	The conclusion section did not match the conclusion in the opening discussion, nor did the cumulative impacts discussion match the conclusion in the opening discussion. The underlined language has been added to the second paragraph of the cumulative impacts discussion. The preferred alternative would contribute short-term, negligible to minor, adverse effects and long-term, negligible, adverse, except the desert tortoise, which would be short- and long-term, moderate, and adverse effects to cumulative impacts. Overall, cumulative impacts would remain long term, minor to moderate, and adverse. The conclusion discussion has been replaced with the following discussion, which matches the conclusion in the ninth paragraph of the section (at the top of page 81). "**Conclusion.** Overall, impacts to threatened, endangered, and special-status species would be short term, minor to moderate, and adverse. Long-term impacts would be negligible to minor and beneficial for the desert tortoise, primarily through the restoration of 10.0 acres of habitat elsewhere, and long-term, negligible, adverse to no impact for other species. Cumulative effects, including the preferred alternative, would be long term, minor to moderate, and adverse."
Page 82, Environmental Consequences—Alternative B: Preferred Alternative, Archeological Resources	A discussion of concerns related to potential impacts to an archeological site just outside the modified Juniper Flats parking area and the ease of access created by the parking area were included in the **Comparative Summary of Potential Environmental Impacts** on page 37, but not included in this discussion. The following sentence is added at the end of the second paragraph on page 82. "After construction, visitor related activities at the Juniper Flats parking area could produce minor to moderate impacts because of the proximity of an archeological site just outside of the area of potential effect."